2 Configuration

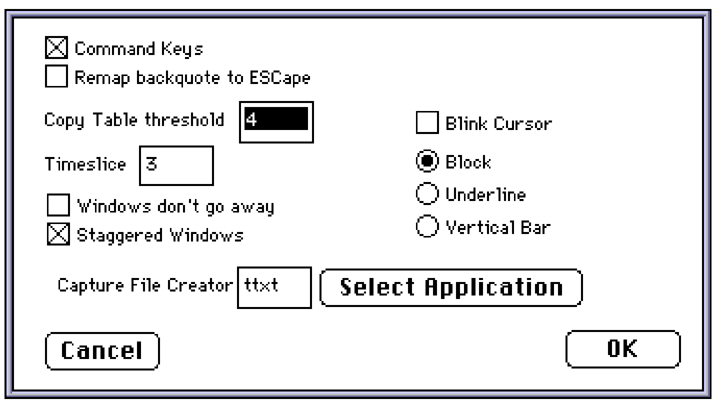
NCSA Telnet for the Macintosh allows you to customize the environment to suit special needs and habits. Version 2.6 of NCSA Telnet for the Macintosh uses an entirely new configuration system. This chapter describes global preferences you can set, the new configuration system, saved sets, and macro definitions.

For information about configuring file-transfer services, see “Configuring an FTP Server” on page 4–3.

Global Preferences

Several preference options affect every session or the operation of NCSA Telnet in general. You can set these options to best suit your environment and work habits.

To set your global preferences, select **Preferences▸Global** from the **Edit** menu. The **Global Preferences** dialog box appears:



Each option in this dialog box is described below.

Option	Description
Command Keys	When you check this box, the menus are configured to accept command key equivalents.
	NOTE: If the **Command Keys** box is not checked and if NCSA Telnet is running on a Macintosh that has no CONTROL key, the ⌘ key remaps to the CONTROL key. If the **Command Keys** box is checked on such machines, you cannot generate CONTROL key characters.
Remap backquote to ESCape	When you check this box, NCSA Telnet sends the ESCape character to the remote host when you press the grave accent (`). (This key is sometimes called the backquote.) This setting is helpful if you use an original Macintosh or Macintosh Plus keyboard.
	This option, however, is available no matter which type of keyboard you have. Pressing ⌘-` always produces a grave accent, regardless of whether you check **Remap backquote to ESCape** in the **Global Preferences** dialog box.

Copy Table threshold

The number you enter in this box determines the minimum number of spaces that are replaced by tabs when you use the `copy table` command instead of the standard `copy` command. You can select **Copy Table** from the **Edit** menu (or press ⌘-T) to copy a table from the NCSA Telnet screen onto the clipboard.

When you select **Copy Table** from the **Edit** menu, all strings of contiguous spaces greater than the threshold are turned into tabs before being placed on the clipboard. This produces a format you can paste into most spreadsheet and graphing programs without losing data or doing additional formatting.

Timeslice

The number you enter in this box determines how much time NCSA Telnet gives to other applications that may be running. Increasing this number reduces NCSA Telnet's responsiveness but improves the performance of applications running in the background. The number you enter is measured in sixtieths of a second.

Windows don't go away

When you check this box, session windows remain open after their associated connections have terminated. The window title is placed in parentheses to signify that the associated connection has closed. You can view, copy, and print text in a window whose connection has been closed. You can also read connection error messages from hosts that—due to an error—may close connections immediately after they are established.

To close such a window, either click in the window's close box or select **Close** from the **File** menu.

Staggered Windows

When you check this box, multiple windows are staggered by a whole title bar. This lets you see each window's title. If this box is not checked, each new window is staggered by only a few pixels.

Blink Cursor

When you check this box, NCSA Telnet makes the cursor blink periodically in session windows.

Block, Underline, Vertical Bar

You can choose the appearance of the cursor in session windows by clicking the appropriate button: **Block**, **Underline**, or **Vertical Bar**.

Capture File Creator

Enter an appropriate four-letter creator type in this box to specify the creator type assigned to the files in which NCSA Telnet saves text captured from sessions. Every Macintosh file has a file type and a file creator type. The *file type* specifies the type of file (e.g., text, word processing document, saved set). The *file creator type* tells the Finder which application to launch when you double-click on a filename.

If you already know the four-letter creator type for the application you want to specify, enter it in the **Capture File Creator** box. If you do not know the four-letter creator type, click the **Select Application** button in the **Global Preferences** dialog box. This opens a standard **Open File** dialog box. Double-click on the name of the application whose creator type you want to find. NCSA Telnet then enters the four-letter creator type in the **Capture File Creator** box.

New Configuration System in Version 2.6

Version 2.6 of NCSA Telnet for the Macintosh uses an entirely new configuration system. Earlier versions required an external text file named `config.tel`, which contained keywords that specified the user's preferences. The configuration system for Version 2.6 is entirely graphical and does not require any external user-editable files.

Ideally, all configuration options for a connection would be combined into one entity. However, due to the large number of options for each connection, NCSA Telnet connection options are divided into two parts: a terminal configuration record and a session configuration record. The *terminal configuration record* contains the options that pertain primarily to NCSA Telnet's terminal emulation. The *session configuration record* contains the remaining options.

Each session configuration record has a terminal configuration record associated with it. You determine which terminal record is associated with a given session record.

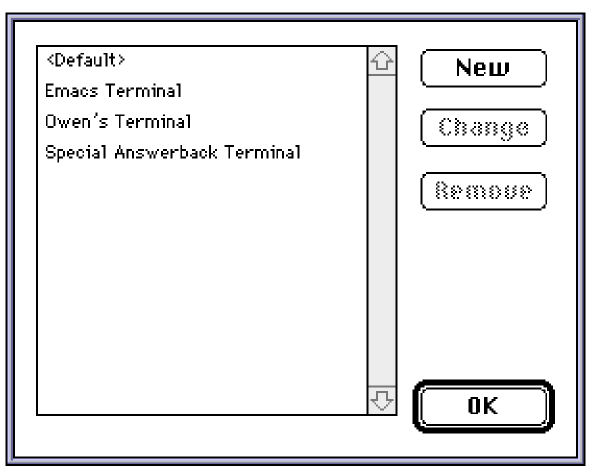
Default Configuration Records

Reasonable default terminal and session configuration records are set when you launch NCSA Telnet for the first time. Although you can change the preferences in these defaults, you cannot delete the default configuration records.

The default terminal configuration record and default session configuration record are used when you enter a hostname in an **Open Connection** dialog box. The preferences contained in the default configuration records are used as the defaults for any connection that does not have a preconfigured session or terminal record. The default records are also used to set the initial values of any new terminal or session configuration records you may define.

Editing Configuration Records

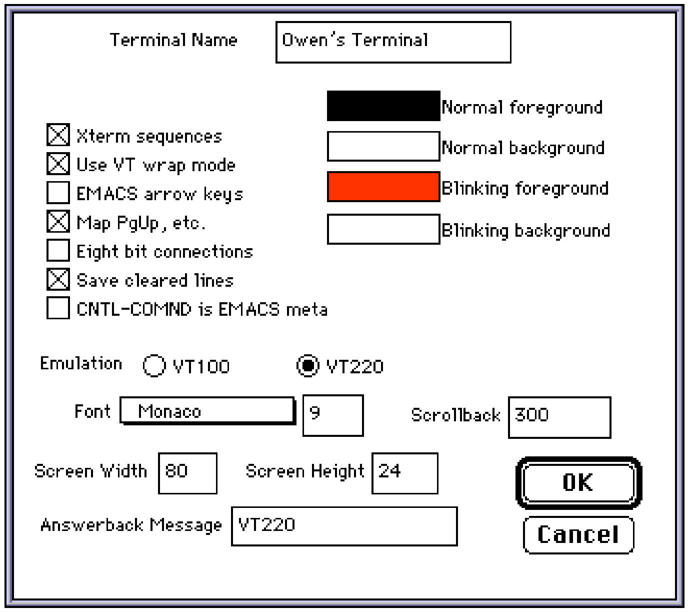
When you select either **Preferences▸Terminal** or **Preferences▸Session** from the **Edit** menu, a **Preferences** dialog box appears similar to this one:



To add a new terminal or session configuration record, click the **New** button. To change an existing terminal or session record, click the **Change** button. To remove an existing terminal or session record, click the **Remove** button. You cannot remove the default.

Editing Terminal Configuration Records

When you click either **New** or **Change** in the **Preferences** dialog box, the **Terminal Configuration Record** dialog box appears:



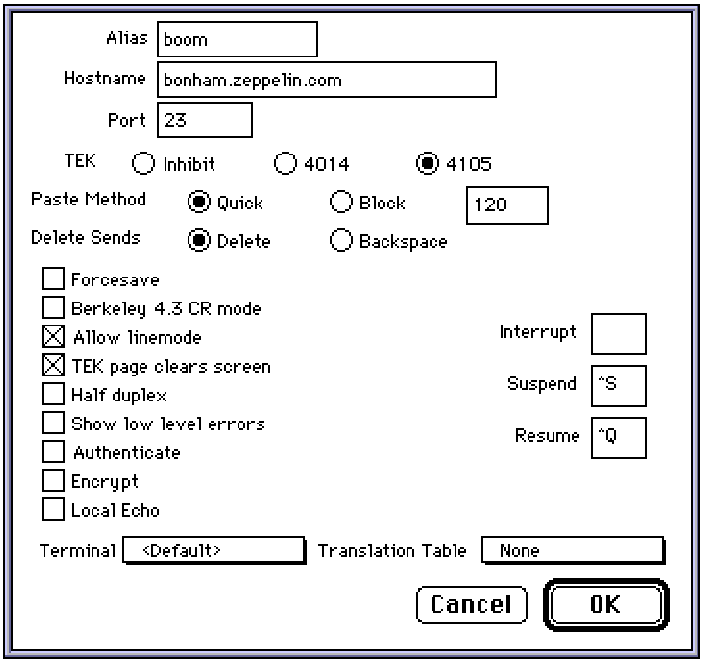
Option	Description
Terminal Name	The terminal name you enter here is listed along with your other terminal configuration records in the **Terminal** popup menu of the **Session Configuration Record** dialog box. When you edit the default terminal configuration record, the **Terminal Name** field is hidden because you cannot rename the default record.
Xterm sequences	When you check this box, NCSA Telnet recognizes the Xterm escape sequences for changing window and icon titles. NCSA Telnet changes the title of the session's window in response to those sequences.
Use VT wrap mode	When you check this box, NCSA Telnet sets the VT emulator to use autowrap mode by default. The VT terminal maintains an internal setting to determine whether characters printed off the right-hand side of the screen cause the terminal to wrap. If you set the terminal to wrap, new characters appear on the next line of the screen and the screen scrolls as necessary. If you disable wrap mode, each new character replaces the last character on the current line and the cursor moves neither right nor onto the next line. **NOTE:** Any time you select **Reset Terminal** from the **Session** menu, wrap mode is disabled.
EMACS arrow keys	When you check this box, pressing your keyboard's arrow keys sends the appropriate control codes for moving around in the EMACS editor. When this box is not checked, NCSA Telnet sends the VT codes for the arrow keys. This option also affects the codes sent when you you use the optional mouseclick feature. For more information, see "Cursor Positioning with the Mouse" on page 3–1.

Map PgUp, etc.	When you check this box, NCSA Telnet uses the PAGE UP, PAGE DOWN, HOME, and END keys to change position in the session's scrollback buffer (instead of sending the VT control codes for these keys to the remote host).
Eight bit connections	When you check this box, NCSA Telnet does not strip out the eighth bit from the data it receives. If you do not check this box, only the first eight bits are retained and all other incoming data are stripped out.
Save cleared lines	When you check this box, any time a VT clear-screen code is received NCSA Telnet saves the screen in the scrollback buffer before clearing the screen. If you do not check this box, all data on the screen are lost.
CNTL-COMND is EMACS meta	When you check this box, pressing CONTROL-COMMAND-*anykey* is equivalent to pressing META-*anykey* on a keyboard with a META key. This option does not send META CONTROL keystrokes because the CONTROL key is needed to activate such a sequence. In future versions of NCSA Telnet, this option will be changed to better simulate META key sequences.
Emulation	Selecting the **VT100** or **VT220** button activates VT100 or VT220 emulation, respectively, for this connection.
Font	Use the two boxes after **Font** to specify the font and font size used in this connection.
Scrollback	In this box enter the number of lines you want in the scrollback buffer.
Screen Width, Screen Height	In these boxes enter the initial size of the VT emulation screen.
Screen Colors	This option is visible only on color-equipped Macintosh computers. Four boxes in the right-hand column (**Normal foreground**, **Normal background**, **Blinking foreground**, and **Blinking background**) let you set the foreground and background colors for the normal and blinking text modes. Clicking on any of the four boxes opens the standard **Color Wheel** dialog box in which boxes are filled with the current color selection. For additional information on using the **Color Wheel** dialog box, refer to the *Macintosh System Software User's Guide*.
Answerback Message	In this box specify the type of terminal you are using. NCSA Telnet sends this text to a remote host that asks the terminal type being used. The defaults are correct for almost all known systems.

Editing Session Configuration Records

Because the session configuration record is consulted only when NCSA Telnet initiates a connection, changes you make in the session configuration record affect only new connections initiated after your change. Think of it as your favorite cookie recipe: if you change the recipe today by adding nuts and chocolate chips, the cookies you baked last week are not affected.

When you click either **New** or **Change** in the **Preferences** dialog box, the **Session Configuration Record** dialog box appears:



Option	Description
Alias	In this box enter the name (*alias*) of the session configuration record. Then, when you enter this alias in the **Host/Session Name** field of the **Open Connection** dialog box, NCSA Telnet uses this session configuration record as well as terminal configuration record specified in the **Terminal** popup menu of the **Session Configuration Record** dialog box. **NOTE:** Spaces are not allowed in alias names. When you edit the default session configuration record, the **Alias** field is disabled because you cannot rename default records.
Hostname	In this box enter the name of the host to which you want to connect. This text is passed to the MacTCP Domain Name Resolver (DNR), which translates a host's domain name into an IP address.
Port	In this box enter the name of the port to which you want NCSA Telnet to attempt the connection to the remote machine.
TEK	There are three choices for Tektronix emulation in NCSA Telnet. **Inhibit** prevents NCSA Telnet from using any Tektronix emulation for this session. **4014** and **4105** select Tektronix 4014 emulation or Tektronix 4105 emulation, respectively.
Paste Method	NCSA Telnet offers two different methods for pasting data into a session. When you select the **Quick** button, NCSA Telnet sends all data to be pasted to the remote host at one time. The Quick method works well for small amounts of text and for sessions involving hosts that are close to you on the network. When you select the **Block** button, NCSA Telnet sends data to be pasted to the remote host in sections, or *blocks*, of text. The size of the block is determined by the number you enter in the box next to the **Block** button. Use the Block paste method when you need to paste large amounts of text or when you are connected to a machine that responds slowly.

Delete Sends

Some hosts expect the keyboard's DELETE character to delete, others expect it to backspace. Select the **Delete** or **Backspace** button to determine which character NCSA Telnet sends to the remote host when you press the DELETE key.

Forcesave

When you check this box, NCSA Telnet always saves the contents of the screen to the scrollback buffer. This option is available only to users of full-screen VMS environments, such as DEC All-in-One.

Berkeley 4.3 CR Mode

When you check this box, you enable a special compatibility option for 4.3 BSD UNIX. There is an official UNIX bug fix for this problem, but some hosts may still want `CR-NULL` used as the end-of-line character.

Allow linemode

When you check this box, NCSA Telnet uses linemode with hosts that support it. If this option is not checked, NCSA Telnet refuses to use linemode.

TEK page clears screen

When you check this box, NCSA Telnet's Tektronix emulation clears the current Tektronix window any time it receives a Tektronix `clear screen` command. If you do not check this box, NCSA Telnet creates a new window for the new Tektronix image. Each new screen created this way takes the session name and time as its name. For more information regarding the Tektronix `clear screen` command, see "Tektronix-Related Commands in the Session Menu" on page 5–2.

Half duplex

This option applies only to hosts that negotiate nonechoing mode but do not expect local line editing. If you check this box, all character keys are sent and echo to the screen immediately. If you do not check this box, characters echo locally and are queued until you press the RETURN or CONTROL key. This option has no effect when the `local echo` option is turned off.

Show low level errors

When you check this box, NCSA Telnet displays minor error conditions it normally does not. These error messages can be helpful when you are trying to diagnose a problem with NCSA Telnet.

Authenticate

When you check this box, NCSA Telnet tries to negotiate a Kerberos-authenticated connection to the remote host, if the remote host supports authentication and if your Macintosh is properly configured. For more information regarding authentication, see "Authentication and Encryption" on page 3–5.

Encrypt

When you check this box, NCSA Telnet tries to negotiate an encrypted connection to the remote host, if the remote host supports authentication and if your Macintosh is properly configured. For more information regarding encryption, see "Authentication and Encryption" on page 3–5.

NOTE: You must have an authenticated connection to use encryption.

Interrupt, Suspend, Resume

NCSA Telnet uses certain key combinations for the `interrupt`, `suspend`, and `resume` commands. Default key assignments for these commands correspond to the standard ASCII characters. These three commands and their default key assignments are:

Interrupt. `Interrupt` (CONTROL-C) sends a telnet interrupt process character that is equivalent to selecting **Send "Interrupt Process"** from the **Network** menu (see "Network-Related Commands" on page 3–4). The host's implementation of telnet is required to listen for and interrupt the current application when this function is received.

`Interrupt` also does a *timing-mark operation* (also known as timing-mark flush and timing-mark processing). In many other implementations of telnet, pressing CONTROL-C can result in a several-minute delay while text scrolls on the screen. This occurs because the TCP protocol has buffered up to 16 Kbytes or even 32 Kbytes of data, which are waiting in the pipeline to be delivered even before you press CONTROL-C. To avoid this scrolling of buffered data, NCSA Telnet initiates a process known as *timing-mark flush* any time you issue an `Interrupt` command.

To do this, NCSA Telnet institutes *timing-mark processing* by sending to the host a special character that the host echoes back. The session appears to pause for up to 15 seconds and then resumes as usual. During the pause, NCSA Telnet throws away all buffered data. You end up pausing a few seconds instead of waiting several minutes.

Suspend. `Suspend` (CONTROL-S) instantly interrupts all output from the network. The current session does not produce any more characters on the screen until you issue the `Resume` command.

Resume. `Resume` (CONTROL-Q) restarts character printing to the current session. `Resume` does nothing unless a `Suspend` command is in effect.

Terminal

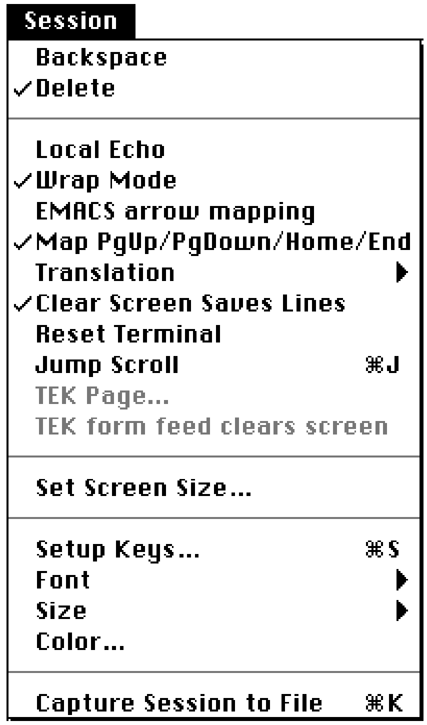
This box contains a popup menu that lets you choose which terminal configuration record will be used when the alias identifying this session configuration record is used to open a session.

Translation Table

This box contains a popup menu that lets you choose which translation table will be initially selected for this session.

Changing Configuration after Session Connected

Use the **Session** menu if you need to change configuration parameters after a session connection is opened. Think of the **Session** menu as table salt: you use the salt shaker to change food at the table after it's too late to go back to the kitchen and fix what you started with.



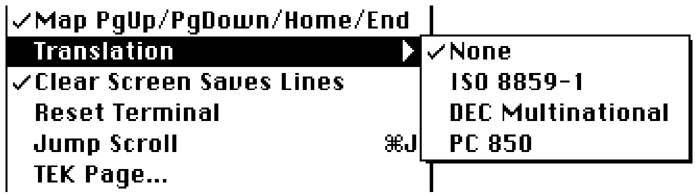
Command	Description
Backspace	When you select the **Backspace** command, pressing the DELETE key sends a backspace character.
Delete	When you select the **Delete** command, pressing the DELETE key sends a delete character.
Local Echo	When you select the **Local Echo** command, NCSA Telnet operates in *local echo mode* (characters are copied to the screen as soon as you press them on the keyboard). If you have not checked**Allow linemode** (see "Editing Session Configuration Records" on page 2–5), NCSA Telnet can operate in two different echo modes: local and remote. In *remote echo mode*, characters are sent to the host, which sends them back to be printed to the screen.
Wrap Mode	Selecting the **Wrap Mode** command turns on the wrap mode of the VT terminal emulator. When this command is not checked, wrap mode is disabled. See also the **Use VT wrap mode** option in "Editing Terminal Configuration Records" on page 2–4.
EMACS arrow mapping	When you select this command, pressing arrow keys on your keyboard sends the appropriate codes to move around in the EMACS editor. When the **EMACS arrow mapping** command is not checked, NCSA Telnet sends the VT codes for the arrow keys.

Map PgUp/PgDown/Home/End

When you select this command, NCSA Telnet uses the PAGE UP, PAGE DOWN, HOME, and END keys to move around in the session's scroll-back buffer. When the **Map PgUp/PgDown/Home/End** command is not checked, NCSA Telnet sends the VT codes for these keys.

Translation ▸

The **Translation ▸** command opens a submenu that lets you choose the translation table for the session. In the sample below, no translation is desired.



Clear Screen Saves Lines

When you select this command, all lines currently displayed on the screen scroll into the scrollback region before the screen is cleared. If **Clear Screen Saves Lines** is not checked, the cleared lines are permanently erased when the screen is cleared.

Reset Terminal

When you select the **Reset Terminal** command, NCSA Telnet resets all VT mode settings, disables wrap mode, resets VT graphics mode, resets the keypad mode to the default, and resets tabs to every eight spaces. Use this command, for example, when a host program accidentally sets VT graphics mode or fails to leave VT graphics mode.

Jump Scroll

Select the **Jump Scroll** command if you want to skip to the end of the local buffer. The screen pauses, then jumps ahead over scrolling text. The text is placed into the scrollback buffer, but the screen advances to the end of the local network buffer instead of printing every line on the screen. The purpose of this feature is to save time. For example, if you enter a command that produces a great deal of output, you can use the **Jump Scroll** command so you do not have to wait for the output to scroll by.

TEK Page...

When you select the **TEK Page...** command, you can quickly create or clear a **Tektronix emulation** window without intervention from host software. Normally the emulation window appears automatically when the `clear screen` command sequence is received from the host, but the **TEK Page...** command creates the window immediately.

To clear the current session window, use the **TEK Page...** command the same way you use the PAGE key on a Tektronix terminal.

The **TEK Page** command is disabled when you select **Inhibit** as the TEK Emulation in the session configuration record that creates this session.

For more information, see the description of **TEK** options in "Editing Session Configuration Records" on page 2–5. See also "Starting a Tektronix Emulation" on page 5–1 and "Tektronix-Related Commands in the Session Menu" on page 5–2.

TEK form feed clears screen

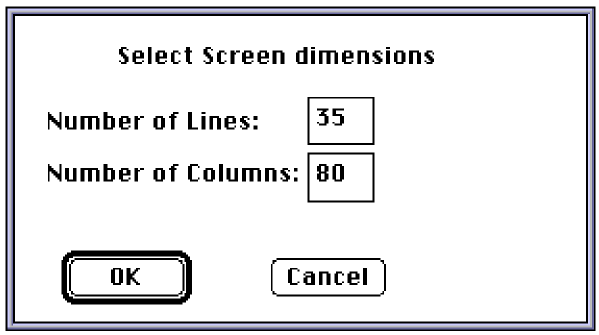
When you select this command, NCSA Telnet's TEK emulation does *not* clear the screen when it encounters a form-feed command. TEK images often conclude with a `form feed` command so that the TEK screen clears as soon as it reaches the end of an image. However, immediately clearing the screen makes it hard to see the final image of a TEK file.

Set Screen Size...

Select this command to change the size of the VT emulation screen. NCSA Telnet's VT emulation screens defaults to 24 lines because an actual VT terminal screen has room for 24 lines of text. Some host systems let you define a VT-like terminal type with more or fewer than 24 lines. You can change the NCSA Telnet VT emulation screen default by editing the terminal configuration record. See the description of the **Screen Width** and **Screen Height** options in "Editing Terminal Configuration Records" on page 2–4.

How to Reset Screen Size. If you change the size of the VT emulation screen, the session window resizes itself to reveal the entire VT screen. To increase or decrease the size of the VT emulation screen from the **Session** menu:

First select **Set Screen Size...** from the **Session** menu. The **Select Screen Dimensions** dialog box appears, showing the current number of lines and columns in the VT emulation screen.



Change the values as desired, then click the **OK** button (or press the RETURN key) to return to your session window. Click the **Cancel** button to abort the change.

Shortcut to Reset Screen Size. To quickly change the size of the VT emulation screen, hold down the OPTION key while you use the size box to resize the window. As the window changes size, NCSA Telnet recalculates the number of lines in the window and displays the current dimensions in the upper-left corner of the window. When you release the mouse button, the new size of the VT emulation screen is set. This method is equivalent to selecting **Set Screen Size** from the **Session** menu.

NOTE: Resizing a session window without holding down the OPTION key only resizes the Macintosh window and does not change the size of the VT emulation screen.

Warnings and Suggestions. If you do not have a good working knowledge of how your host system uses terminals with more than 24 lines, we recommend that you use only 24-line windows. The following warnings and suggestions assume that you are familiar with UNIX-based software to control the number of lines for the terminal. Consult your host system documentation or system administrator for more information.

The `termcap` file, which is found only in UNIX systems, is commonly located in the `/etc/termcap` file. It can be set up to include the number of lines on the terminal. The default VT100 `termcap` file explicitly sets a 24-line window, so even if you enlarge your NCSA Telnet window, the host uses only the top 24 lines. You can create special termcap entries by editing the `/etc/termcap` file; copy the VT100 entry to a new name and change the number of lines to your preferred screen size.

Berkeley UNIX-based systems have a special feature in the stty program. The number of rows in a session window can be set to any value, and applications programs such as vi learn your window size from the stty setting. To set the window size to 33 lines, enter **`stty rows 33`**.

You can use the special macro variable # to create a macro that issues this command and automatically substitutes the number of lines for the current window. For example, you could define the macro for ⌘-0 as **`stty rows \#`**. Now you can reset the window size by pressing ⌘-0, then RETURN. The sequence \# is replaced with the proper number of lines. For information about creating and saving macros, see "Macro Definitions" on page 2–15.

Some systems have a program installed called resize. The resize program sends a special sequence of VT control characters to NCSA Telnet's VT emulator to determine the size of the screen. If resize is available on your system, adding **`resize > /dev/null`** to your `.cshrc` or `.login` file automatically sets your screen size correctly when you log on. To determine if the resize program is available at your site and for help using it, contact your system administrator.

NAWS (Negotiations About Window Size). NAWS is a relatively new option in the telnet standard. UNIX hosts that support NAWS allow NCSA Telnet to send information to the host regarding the VT window size. Consequently, when you select **Set Screen Size...** from the **Session** menu to change the VT screen size , the new screen size is sent over the network to the host and you do not need to use the stty program. The host knows how big the window is, which eliminates possible problems for screen-oriented applications such as the vi editor.

NOTE: NAWS is not supported by all UNIX machines. You can determine if the host you are connected to supports NAWS by changing the size of the VT emulation screen and then asking the remote host for the screen size. If the host responds with a screen size that matches the new screen size you have just set, the host supports NAWS.

Setup Keys...

Use the **Setup Keys...** command to select which keys, if any, issue the telnet commands `interrupt`, `suspend`, and `resume`. See the description of the **Interrupt, Suspend, Resume** options in"Editing Session Configuration Records" on page 2–5.

Font ▸

The **Font ▸** command opens a submenu containing the fonts you can use to display text in a session window. When you select a font from this submenu, the current window is resized to contain the text and the selected font is used to display all text in the current window.

NOTE: Proportionally spaced fonts—which include most fonts except Courier and Monaco—display slowly and appear spread out.

Size ▸

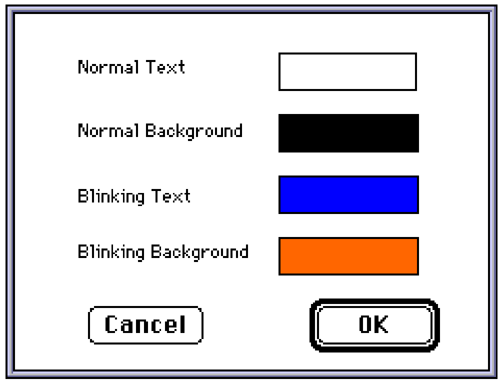
The **Size ▸** command opens a submenu that contains the point sizes you can use to display text in a session window. The submenu lists several sizes, checks the current size, and outlines all sizes in your system. When you select a point size from this submenu, the current window is resized to contain all the resized text and the text is redrawn according to the specified point size.

NOTE: Sizes that are not outlined in the submenu must be scaled by the system software and therefore may be slow and less sharply defined than nonscaled point sizes.

Color...

The **Color...** command applies only to Macintosh computers that are color-equipped. To change the foreground and background colors of the current window for both normal text and blinking text:

First select **Color...** from the **Session** menu. The **Color Selection** dialog box appears:



Then click the box next to the item to which you wish to assign a color: **Normal Text**, **Normal Background**, **Blinking Text**, or **Blinking Background**. This opens the **Color Wheel** dialog box. Select a new color by clicking in the color wheel. The color you select appears in the top rectangle under the heading **Please Select New Color**. Click **OK** (or press the RETURN key) to set the color change and return to the **Color Selection** dialog box. The box next to the item you selected in Step 2 reflects the color you chose from the **Color Wheel** dialog box. Repeat to assign colors to other items in the **Color Selection** dialog box. Click **OK** when you are done choosing colors. The new colors are applied to your current session window.

For additional information on using the **Color Wheel** dialog box, refer to your *Macintosh System Software User's Guide*.

Capture Session to File

NCSA Telnet can save the text from a session to a file. When you select thiscommand, all normal text output that appears on the screen is also saved to whatever file you specify in the **Save File** dialog box. When the **Capture Session to File** command is not checked, this functionality is turned off.

Saved Sets

NCSA Telnet makes it easy for you to begin multiple sessions quickly. If you use saved sets, you can log on and get right to work without resetting the special characteristics and configuration of a connection each time you start up.

A *set*—a snapshot of open sessions and their current configurations—consists of current macro settings and each session's window location and size, connected host, window name, scrollback setting, color, font, font size, backspace/delete settings, and all other configuration information.

Saving a Set

To save a set:

1. Log on to the desired host as instructed in "Logging on to Your Host" on page 1–3.
2. Customize the session by moving the session window to an ideal location on the screen, specifying a background or text color, choosing a font and font size, setting the desired number of scrollback lines, and choosing the function for the BACKSPACE/DELETE key.
3. Select **Save Set** from the **File** menu.
4. A **File** dialog box appears and prompts you to name the set.
5. After naming the set, click on the **Save** button in the dialog box to save the set.

Using a Saved Set

Saved sets let you bypass the start-up procedure described in "Opening and Closing a Connection" on page 1–2. Specifically, you do not need to select **Open Connection** from the **File** menu (or press ⌘-O) or to specify the connection host or window name. These operations are performed automatically when you load a set.

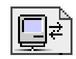
After you load a set, the session window automatically appears for the specified host at the specified location on the screen and with the specified window name, scrollback setting, color and other characteristics. The following characteristics are saved in a set:

- Session name
- Hostname
- Port number
- Window size and location
- Scrollback setting
- BACKSPACE/DELETE key setting
- Macro definitions
- Command-key setting
- Number of columns
- Tek clear-screen setting
- Font and font size
- Color characteristics
- Assigned keys for Interrupt, Suspend, and Resume functions
- CRMAP setting
- Linemode setting
- Eight-bit status
- Translation table setting
- TEK emulation setting
- Answerback message

Loading a Saved Set

From the Finder

To load a set from the Finder and automatically invoke NCSA Telnet, double-click on the saved-set icon or filename. The sample below shows the saved-set icon for a set named `Setup One`.



Setup One

From within NCSA Telnet

To load a set from within the NCSA Telnet application, select **Load Set** from the **File** menu. In the **File** dialog box that appears, select and open the set.

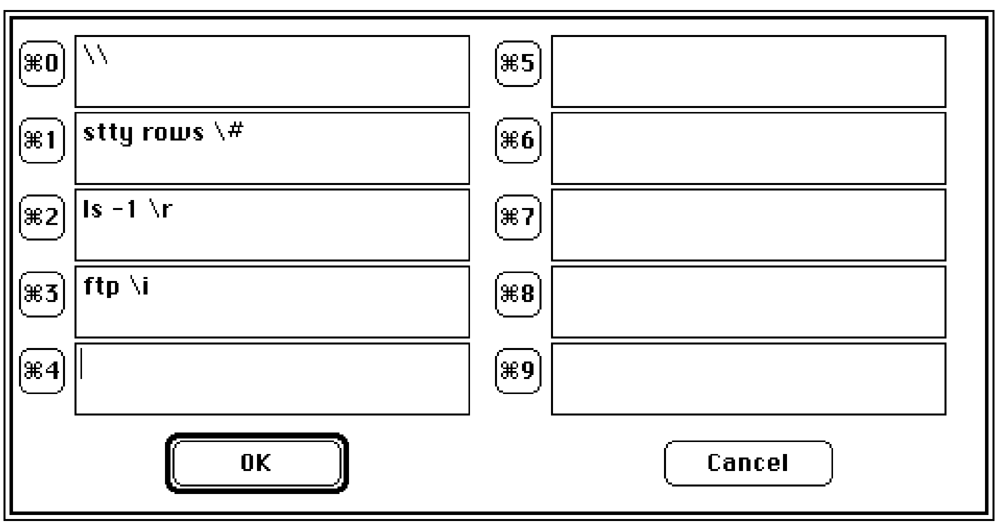
NOTE: You can edit a set datafile using any editor capable of editing files, even if the datafile's Macintosh file type is not TEXT. However, don't rely on this feature because it may not work with future versions of NCSA Telnet.

Macro Definitions

NCSA Telnet lets you use the key combinations ⌘-0 through ⌘-9 as macro keys. You can program these keys to send from 0 to 255 characters.

To define a macro:

1. Select **Set Macros** from the **Edit** menu or press ⌘-M. The **Macro Configuration** dialog box below shows several sample macro definitions.



2. Click on the button of the command key you wish to define, or select the box next to that button.
3. Enter the appropriate macro key sequence. Unless you are familiar with the C programming language, the key sequences that generate special control characters in a macro may seem somewhat strange. To define a special character, you must first enter a backslash (\). Indicate nontypable control characters with their equivalents in the octal numbering system. Some common macro key combinations you might want to enter are listed below.

4. Click on the **OK** button (or press the RETURN key) to activate the new macros, or click on the **Cancel** button to invalidate the additions or changes you made. Clicking either **OK** or **Cancel** returns to the application.

Common Macro Key Combinations

Desired Character	Definition
Backslash (\)	`\\`
TAB	`\t`
ESC	`\033`
CONTROL-C	`\003`
CONTROL-D	`\004`
CONTROL-E	`\005`
CONTROL-H *or* BACKSPACE	`\010`
Size of current window	`\#` (Refers to setting the number of usable lines in a session window. See the **Set Screen Size** command described in "Changing Configuration after Session Connected" on page 2–9.)
Internet address of this Mac	`\i` (See also the descriptions of the **Show Network Numbers** command in "Network-Related Commands" on page 3–4 and the **Send IP Number** command in step 3 of "Issue the FTP Command" on page 4–6.)

Reverting to Previous Macro Definitions

While you are working in the **Macro Configuration** dialog box, you can undo changes you made to a macro and also revert the associated command key to its previous setting—just click on the button corresponding to that command key. For example, to undo changes to the definition for ⌘-2, click on the **⌘2** button. To simultaneously abandon all changes you have made, click on the **Cancel** button.

Saving Macros

Currently the only way to save your macro settings is in a saved set. See "Saved Sets" on page 2–13. NCSA plans to extend the macro capability of NCSA Telnet in future versions.